

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* SCOTT R. BRUDAGE,  
DAVID A. KOHLER, and  
RICHARD T. ENGLE

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Appeal No. 2004-0835  
Application No. 09/603,585

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HEARD: June, 8, 2004

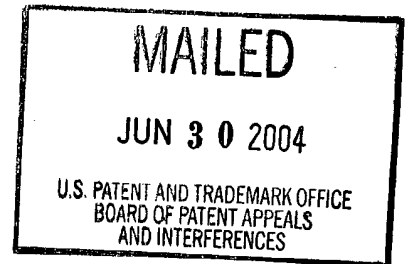
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Before PAK, TIMM and JEFFREY T. SMITH, *Administrative Patent Judges*.

JEFFREY T. SMITH, *Administrative Patent Judge*.

***DECISION ON APPEAL***

Applicants appeal the decision of the Primary Examiner finally rejecting claims 1 to 19, 23 to 35 and 39 to 51, all of the pending claims. We have jurisdiction under 35 U.S.C. § 134.



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***CITED PRIOR ART***

As evidence of unpatentability, the Examiner relies on the following references:

Jessup et al. (Jessup '393)	5,288,393	Feb. 22, 1994
Jessup et al. (Jessup '567)	5,593,567	Jan. 14, 1997
Jessup et al. (Jessup '866)	5,653,866	Aug. 05, 1997
Jessup et al. (Jessup '126)	5,837,126	Nov. 17, 1998

California Air Resources Board (CARB) Properties and Specifications for Phase 3 Reformulated Gasoline (Jan. 2003).<sup>1</sup> (CARB Phase 3)

The Examiner has rejected claims 1 to 19, 23 to 35 and 39 to 51 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Jessup '393, Jessup '567, Jessup '866 or Jessup '126 individually with CARB Phase 3. (Answer, pp. 3-6).

Appellants submit that the appealed claims subject to prior art rejections stand or fall together in the following groups: Group I (claims 1, 2, 4, 6, 8, 10, 12-19, 23-25 and 39-51) and Group II (claims 3, 5, 7, 9 and 11). Appellants' discussion of the Group II claims, Brief page 6, does not provide separate arguments

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<sup>1</sup> Appearing in the specification table 2, page 7.

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for the patentability of this subject matter. Specifically Appellants state “the arguments set forth above with regard to the lack of motivation in the CARB Phase 3 Regulation is believed to apply, and thus these claims as well patentably distinguish the prior art.” (Brief, p. 6). Thus, Appellants have failed to present separate arguments for the Group II claims. Accordingly, all the claims will stand or fall together. We select claim 1 as representative of all of the claims on appeal. *Note In re King*, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

### ***DISCUSSION***

We have carefully reviewed the claims, specification and applied prior art, including all of the arguments advanced by both the Examiner and Appellants in support of their respective positions. This review leads us to conclude that the Examiner’s § 103 rejections are well founded. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984).

Rather than reiterate the conflicting viewpoints advanced by the Examiner and Appellants concerning the above-noted rejections, we refer to the Answer and the Briefs.

Appellants' invention is directed to a method of blending unleaded gasoline.

The scope of Appellants' invention can be ascertained from claims 1 and 3 reproduced below:

1. A method of blending unleaded gasolines which are substantially free of ether compounds and which have a Reid vapor pressure of greater than or equal to 7.00 and less than or equal to 15.00 psi, which method comprises

(a) blending some or all gasoline component streams from an oil refinery and keeping the blend substantially free of ethers and with a sulfur content no greater than 10 ppm, and

(b) controlling the blending of the streams such that the blended unleaded gasolines are in compliance with a California Predictive Model.

3. The method of Claim 1, wherein the blending is such that the blended unleaded gasolines are in compliance with the Phase 3 California Predictive Model.

One of the major environmental problems confronting the United States and other countries is atmospheric pollution (i.e., "smog") caused by the emission of gaseous pollutants in the exhaust gases from automobiles. Gasoline are known fuels composed of a mixture of hydrocarbons having different boiling points at atmospheric pressure. (Specification, p. 5). There is a desire to reduce the pollutants that are emitted from the exhaust gases from automobiles. According to the specification, page 6, in 1991 the California Air Resources Board developed

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standards for gasoline that produce lower emissions of pollutants. Sulfur was included in the list of pollutants that were sought to be regulated by CARB.

The method of claim 1 requires blending some or all gasoline component streams and keeping the sulfur content of the blend no greater than 10 ppm. The method of claim 3 specifies that the blended unleaded gasolines are in compliance with the Phase 3 California Predictive Model.

The Examiner asserted the claimed invention would have been obvious to a person of ordinary skill in the art over the combination any of the Jessup references combined with CARB Phase 3. The Examiner found that the Jessup references teach that by controlling one or more properties of a gasoline fuel suitable for combustion in automobiles, the emissions of NO<sub>x</sub>, CO and/or hydrocarbons can be reduced. (Answer, p. 3). The Examiner found that the blending of hydrocarbon to produce less polluting gasoline while controlling the Reid Vapor Pressure was known by persons skilled in the art. (Answer, pp. 3-4). The Examiner also found that the controlling of pollutants, i.e., toxic air contaminants, including sulfur was regulated by CARB. (Answer, p. 4). According to the Examiner, "the method of blending hydrocarbon gasoline steams based on predictive equations of exhaust emissions is taught by the prior art." (Answer, p. 4). The Examiner asserted that it would have been obvious to the skilled gasoline formulator to limit the amount of

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sulfur content, as required by the claimed subject matter, for gasoline sold in California to comply with the state regulations. (Answer, p. 5). The Examiner further asserted that it would have been obvious to the skilled gasoline formulator to limit the amount of sulfur content to 10 ppmw due to the impact on the atmospheric pollution caused by the emission of gaseous pollutants in the exhaust gases from automobiles. (Answer, p. 5). We adopt the Examiner's position as our own.

Appellants argue that the prior art does not provide motivation or guidance to restrict the amount of sulfur to levels less than 10 ppmw in gasoline. (Brief, pp. 4-5). This argument is not persuasive. At least since 1991, the California Air Resources Board has recognized the need to reduce pollutants from the environment. It has not been disputed that sulfur emissions are recognized to be a pollutant for the atmosphere. A person of ordinary skill in the art that desired to reduce the pollution of sulfur from gasoline would have reasonably expected that elimination or reduction in the content of sulfur in the gasoline blending streams would have produced this result. If sulfur is not present in the produced gasoline, it will not be released from the gasoline into the atmosphere.

Appellants argue that CARB Phase 3 cannot be used against claims 1, 2, 4, 6, 8, 10, 12-19, 23-35 and 39-51 because the filing date of these claims precedes the CARB Phase 3 regulations. (Brief, p. 6).

Appellants' argument appears to be based on the effective date of the CARB Phase 3 regulations. The Examiner has relied on the CARB Phase 3 regulations appearing in the specification as it is Appellants' admission in the record. However, even if we were to determine that the CARB Phase 3 regulations were not available as "prior art", the motivation to reduce the sulfur content in gasoline predates the effective date of the CARB Phase 3 regulations.<sup>2</sup> As stated above, at least since 1991 the California Air Resources Board has recognized the need to reduce sulfur pollutants from the environment. Thus, as indicated *supra*, a person of ordinary skill in the art that desired to reduce the pollution of sulfur from gasoline would have reasonably expected that elimination or reduction in the content of sulfur in the gasoline blending streams would have produced this result.

Appellants argue that "[i]t is only through the realization of the advantages of the present invention, however, and the teachings of the present application, that one of ordinary skill in the art would indeed be motivated to go even further than that required by California Phase 3 Regulations, and restrict and control the amount of sulfur to less than 10 ppmw in the gasoline." (Brief, p. 5).

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<sup>2</sup> In the event of further prosecution, the date when the draft(s) of the CARB Phase 3 regulations were published should be included in the record.

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This argument is not convincing. The elimination of pollution from sulfur would have provided motivation to eliminate or reduce the content of sulfur in the gasoline blending streams. Appellants have not identified an unexpected advantage that is obtained by limiting the content of sulfur.

The rejections of 1 to 19, 23 to 35 and 39 to 51 as unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Jessup '393, Jessup '567, Jessup '866 or Jessup '126 individually with CARB Phase 3 are affirmed.

As a final point, we note that Appellants have based no argument upon objective evidence of nonobviousness, such as unexpected results, which rebuts the inference of obviousness established by the Examiner.

### ***CONCLUSION***

Based on our consideration of the totality of the record before us, having evaluated the *prima facie* case of obviousness in view of Appellants' arguments, we conclude that the subject matter of claims 1 to 19, 23 to 35 and 39 to 51 would have been obvious to a person of ordinary skill in the art from the combined teachings of the cited prior art for the reasons expressed above and by the Examiner.

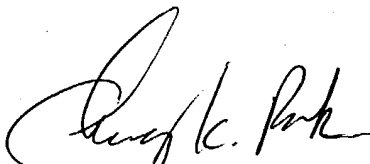


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Time for taking action

No time period for taking any subsequent action in connection with this  
appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED**

  
CHUNG K. PAK  
*Administrative Patent Judge*

  
CATHERINE TIMM  
*Administrative Patent Judge*

  
JEFFREY T. SMITH  
*Administrative Patent Judge*

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E Joseph Gess Esq

Burns Doane Swecker & Mathis LLP

P O Box 1404

Alexandria, VA 22313-1404